

PEER-REVIEW REPORT 1

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-18-00356

Title: Rosmarinic acid elicits neuroprotective effect against experimental ischemic stroke by upregulating Nrf2, HO-1 via PI3K/ Akt pathway

Reviewer's Name: Han-A Park

Reviewer's country: USA

Date sent for review: 2018-06-02

Date reviewed: 2018-06-13

Review time: 11 Days

1. Do you consider this paper is hotspots or important areas in the research field related to neural regeneration?

Yes

2. Which area do you think this paper falls into? Neurorepair, neuroprotection, neuroregeneration or neuroplasticity.

neuroprotection

3. Is the manuscript technically sound, and do the data support the conclusions?

Please see the comments

4. Has the statistical analysis been performed appropriately and rigorously?

Please see the comments

5. Is the manuscript presented in an intelligible fashion and written in Standard English?

Yes

6. Your peer review comments will be published as an open peer review report. Do you agree to have your name included with the published article?

Yes

Manuscript Rating Question(s):	Scale	Rating
The subject addressed in this article is worthy of investigation.	[1-3]	3
The information presented was new.	[1-5]	5
The conclusions were supported by the data.	[1-10]	9

COMMENTS TO AUTHORS

This is an interesting study, and we also appreciate a nice summary of RA's role shown in Figure 7. However, authors still need to clarify following concerns;

1. This manuscript is missing Figure legends (please include sample size).
2. More descriptions on the graphs. Define *, #, and &. For example, specifying that "*" means significantly different from the tMCAO group, and "#" means significantly different from RA-M group (this is something I have seen in other papers and helps me understand the figures better)

Some groups are missing statistic explanation (e.g. Majority of bar graphs between sham vs. MCAO look significant, but authors did not address this in the figure.)

3. Introduction; Expound on the relevance of RA in the human diet; i.e., the Lamiaceae herbs and explain how they are often used in culinary (basil, mint, rosemary, sage, savory, etc.)
4. Did you measure activated bax or total bax (including both active and inactive bax)?
5. Add brief descriptions in the Method section instead of saying 'according to the manufacturers' instructions'.
6. Why do HO-1 and Nrf2 expression in sham vs. MCAO vs. RA in Figure 4 and Figure 6 look so different?